

WATER MANAGEMENT DIVISION MONTHLY REPORT

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RESERVOIR OPERATION AND SYSTEM STATUS FOR JANUARY 1999

HIGHLIGHTS –The stage at Cairo varied within a range of 19.0-48.2 feet, ending the month near 48.2 feet. The Ohio River crested at Cairo on the 28th at 48.21 feet. Normal stage for January is 28 feet.

WEATHER – The weather during January was warm and wet. The month began with a series of snow, rain, and freezing-rain storms that saturated the soil and created some snowpack in the northern areas of the basin. The heaviest of these storms dropped 1-2 inches of rainfall across Tennessee and Kentucky on the 9th. As the upper air winds shifted to strong southwesterly, heavy rains of 4-6 inches were observed over western Tennessee, western Kentucky, and southern Indiana on 22-24 January. Temperatures averaged 3-6 degrees above normal and precipitation was almost double the normal.

The following table summarizes temperature and precipitation for January:

TEMPERATURE AND PRECIPITATION – JANUARY 1999

	TEMPERATURE		PRECIPITATION	
STATION	OBSERVED DEGREES F	DEPARTURE FROM NORMAL	OBSERVED INCHES	DEPARTURE FROM NORMAL
Pittsburgh, PA	30.1	+4.0	4.88	+2.34
Charleston, WV	38.2	+6.1	4.81	+1.90
Columbus, OH	31.0	+4.6	2.87	+0.69
Cincinnati, OH	32.4	+4.3	4.76	+2.17
Louisville, KY	36.8	+5.1	7.25	+4.39
Indianapolis, IN	28.5	+3.0	6.35	+4.03
Evansville, IN	34.7	+4.6	6.00	+3.55
Nashville, TN	42.5	+6.3	9.24	+5.66

STREAMFLOW -- Ohio River monthly average flows for January ranged from a low of 124 percent of normal at Pittsburgh, PA to a high of 131 percent of normal at Evansville, IN. Daily flows ranged from a low of 12 percent of normal at Pittsburgh, PA to a high of 381 percent of normal at Pittsburgh, PA.

The following table presents the flow data summary for January at the Ohio River Index Stations:

FLOW DATA - JANUARY 1999

STATION	AVERAGE MONTHLY FLOW	PERCENT LONG-TERM NORMAL		
	CUBIC FEET/SECOND	MONTHLY	DAILY	
	·		HIGH	LOW
Pittsburgh, PA	53,865	124	381	12
Huntington, WV	141,810	126	265	20
Cincinnati, OH	178,190	131	245	21
Louisville, KY	219,870	130	233	18
Evansville, IN	251,260	131	237	19
Paducah, KY	490,100	124	233	37

RESERVOIRS -- January started with 1.2% utilization of the total system flood control storage and ended the month at 11.3%. The highest total was 14.3% on the 26th. System-wide augmentation storage increased from 53.8% at the beginning of the month to 89.4% by the end of the month. Significant flood storage utilization in excess of 25% occurred at twenty-six reservoir projects during January:

Atwood	38.4%	Beach City	32.0%
Berlin	64.4%	Bolivar	31.8%
Cagles Mill	33.2%	Clendening	39.3%
Cecil M. Hardin	36.2%	Conemaugh	48.8%
Crooked Creek	31.7%	Huntington	52.4%

J. Percy Priest	40.5%	Leesville	38.7%
Mahoning Creek	46.1%	Milton	32.1%
Mississinewa	43.9%	Piedmont	27.6%
Salamonie	37.4%	Senecaville	37.4%
Shenango	26.6%	Stonewall Jackson	33.8%
Tappan	34.4%	Tionesta	34.5%
Tygart	25.8%	Union City	37.2%
West Branch (Kirwan)	25.6%	Wills Creek	37.6%

The following table depicts storage change by tributary reservoir subsystem for January:

CHANGE IN STORAGE TRIBUTARY-RESERVOIR SUBSYSTEM	(ACRE-FEET)
Allegheny-Monongahela-Beaver	+488,800
Muskingum-Little Kanawha-Hocking-Kanawha-Guyandotte	+244,100
Twelvepole-Big Sandy-Little Sandy-Scioto	+27,600
Little Miami-Licking-Mill Creek-Great Miami	+80,200
Kentucky-Salt-Green-Wabash	+770,800
Cumberland	+3,427,100
TOTAL	+5,038,600

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